

## ABSTRACT OF THE DISCLOSURE

Apparatus and methods for maintaining dependencies among a set of objects in a computer program.

Object dependencies are recomputed dynamically when settable object values are changed.

Observer-only objects are enqueued for synchronization when marked as invalid. A synchronization

- 5 process recomputes dependent object values, in the course of which recomputation object dependencies are established according to current object values.

101233.P11